

## In The Claims

1. (Currently Amended) A device for recognizing particles in milk comprising: a measuring surface and a housing, ~~characterized in that~~ wherein the measuring surface is structured so ~~as to cause the~~ receives milk to ~~spread on the measuring surface in that the measuring surface~~ and has a specific surface roughness.
2. (Currently Amended) The device according to claim 1, ~~characterized in that~~ wherein the surface roughness of the measuring surface has a typical height in the range of 0.3  $\mu\text{m}$  to 20  $\mu\text{m}$  and ~~preferably a roughness in the range between 0.5  $\mu\text{m}$  and 5  $\mu\text{m}$  and particularly preferably, a roughness between approx. 2  $\mu\text{m}$  and 4  $\mu\text{m}$ .~~
3. (Currently Amended) The device according to claim 1 ~~[[or 2]]~~, ~~characterized in that~~ wherein the surface roughness of the measuring surface has a value of 27 to 30 according to VDI 3400, edition 1975-06.
4. (Currently Amended) The device according to ~~at least one of the preceding claims~~ claim 1, ~~characterized in that~~ wherein the measuring surface is inclined relative to the horizontal at an angle between about 0° and about 10°, ~~preferably approx. 2°.~~
5. (Currently Amended) The device according to ~~at least one of the preceding claims~~ claim 1, ~~characterized in that~~ wherein the measuring surface comprises at least one layer of a hydrophilic material.

Applicant: Wiethoff et al.  
Application No.:

6. (Currently Amended) The device for recognizing particles in milk in particular according to ~~at least one of the preceding claims claim 1, having a measuring surface and a housing~~ and further comprising an illuminating device having at least one first light-emitting area and at least one second light-emitting area, wherein a central light beam of the first light-emitting area is directed at the side of the measuring surface opposite the first light-emitting area and wherein a central light beam of the second light-emitting area is directed at the side of the measuring surface opposite the first light-emitting area.
7. (Currently Amended) The device for recognizing particles in milk in particular according to ~~at least one of the preceding claims claim 1 having a measuring surface and a housing,~~ characterized by and further comprising a temporary storage to receive a milk sample from which specific quantities of milk can repeatedly be drained for measuring.
8. (Currently Amended) The device according to ~~the preceding claim 7, characterized by~~ and further comprising at least two opposite illumination units which light the sample holder at such an angle that the focus of the light beams is incident on the opposite side of the measuring surface.
9. (Currently Amended) The device according to ~~at least one of the preceding claims claim 1,~~ characterized in that and further comprising at least one diffuser unit is provided to obtain diffused light.
10. (Currently Amended ) The device according to ~~at least one of the preceding claims claim 1,~~ characterized in that and further comprising at least one detector means ~~is provided~~.
11. (Currently Amended ) The device according to ~~at least one of the preceding claims claim 1,~~ characterized in that and further comprising a sight glass ~~[[is]]~~ disposed above the measuring surface.

Applicant: Wiethoff et al.  
Application No.:

12. (Currently Amended) The device according to ~~at least one of the preceding claims claim 1,~~  
~~characterized in that the~~ and further comprising a sight glass ~~[[is]]~~ positioned at an angle to  
the horizontal of larger than 20°, ~~preferably larger than 30° and particularly preferably~~  
~~between 40° and 60°.~~
13. (Currently Amended) The device according to ~~at least one of the preceding claims claim 1,~~  
~~characterized in that the~~ and further comprising a sight glass that is heatable.
14. (Currently Amended) The device according to ~~at least one of the preceding claims claim~~  
11, characterized in that wherein the distance between the detector means and the sight  
glass is shorter than a mean distance between the sight glass and the measuring surface  
wherein the distance between the detector means and the sight glass is preferably shorter  
than a shortest distance between the sight glass and the measuring surface.
15. (Currently Amended) The device according to ~~at least one of the preceding claims claim~~  
11, characterized in that wherein the sight glass is coated ~~or nano-coated~~ to improve the  
running off of ~~any present~~ milk drops.
16. (Currently Amended) The device according to ~~at least one of the preceding claims claim~~  
11, characterized in that and further comprising a rinsing nozzle ~~is provided~~ to rinse  
preferably the sight glass ~~and/or the sample holder~~ with a cleaning agent.
17. (Currently Amended) The device according to ~~at least one of the preceding claims claim~~  
11, characterized in that and further comprising a nose ~~is provided~~ at an inlet area to  
~~prevent that~~ reduce splashing of the sight glass ~~is splashed.~~
18. (Currently Amended) The device according to ~~at least one of the preceding claims claim 1,~~  
~~characterized by~~ and further comprising a temporary storage to temporarily store a milk  
sample to be examined.

Applicant: Wiethoff et al.  
Application No.:

19. (Currently Amended) The device according to ~~at least one of the preceding claims claim 1,~~  
~~characterized in that the~~ wherein a milk sample to be examined can be drained in multiple  
portions and wherein each portion may be evaluated to obtain better statistical reliability of  
the analysis result.
20. (Currently Amended) The device according to ~~at least one of the preceding claims claim~~  
~~18, characterized in that~~ wherein the temporary storage is connected with a valve through  
which air can be allowed to enter for conveying the milk portion to be examined to the  
measuring surface.
21. (Currently Amended) The device according to ~~at least one of the preceding claims claim~~  
~~20, characterized in that a~~ wherein the valve ~~means allows to feeds~~ the measuring housing  
in specific stages.
22. (Currently Amended) The device according to ~~at least one of the preceding claims claim 1,~~  
~~characterized by and further comprising~~ at least one ~~control means for controlling~~  
controller.
23. (Currently Amended) The device for recognizing particles in milk in particular according  
to ~~at least one of the preceding claims claim 1, and further comprising a measuring surface~~  
~~and a housing, characterized in that above the measuring surface there is disposed a~~  
partition wall which is inclined to the horizontal and optically transmissible, and through  
which the measuring surface can be viewed.
24. (Currently Amended) A method for recognizing particles in milk, ~~characterized in that a~~  
~~milk sample to be examined is conveyed~~ comprising the steps of: conveying to a  
measuring surface; ~~[[and]] capturing an image of the measuring surface is captured,~~ and  
employing at least one object recognition rule ~~is employed~~ to distinguish at least two types  
of detected particles.

Applicant: Wiethoff et al.  
Application No.:

25. (Currently Amended) The method according to claim 24 wherein a particle count serves to ~~make a qualitative and/or quantitative statement~~ analyze milk qualities.
26. (Currently Amended) The method according to claim[[s]] 24 ~~[[or 25]]~~, ~~wherein at~~ and further comprising the step of: determining least one area proportion value of at least one particle type ~~is determined~~.